

FIG. 1

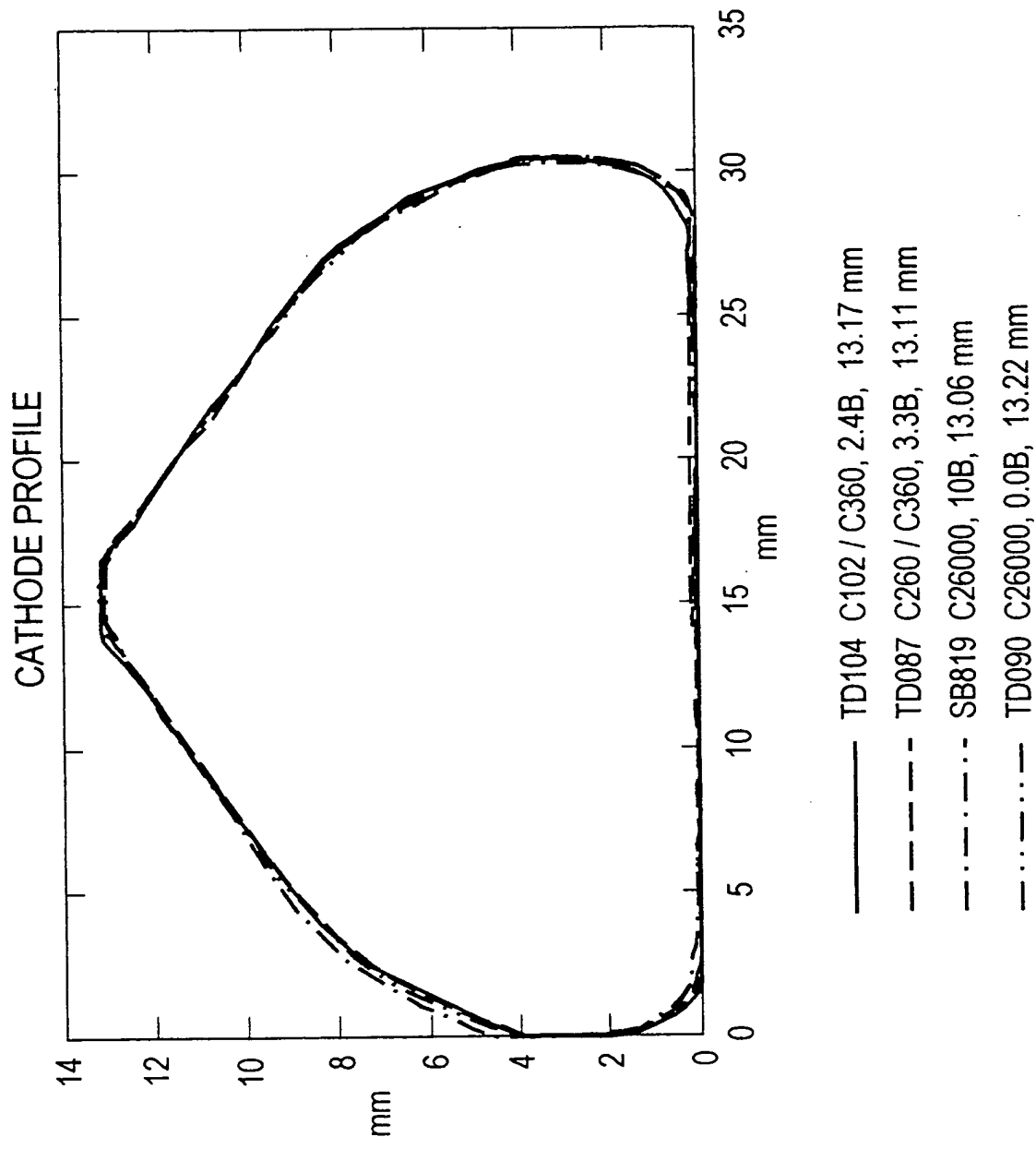
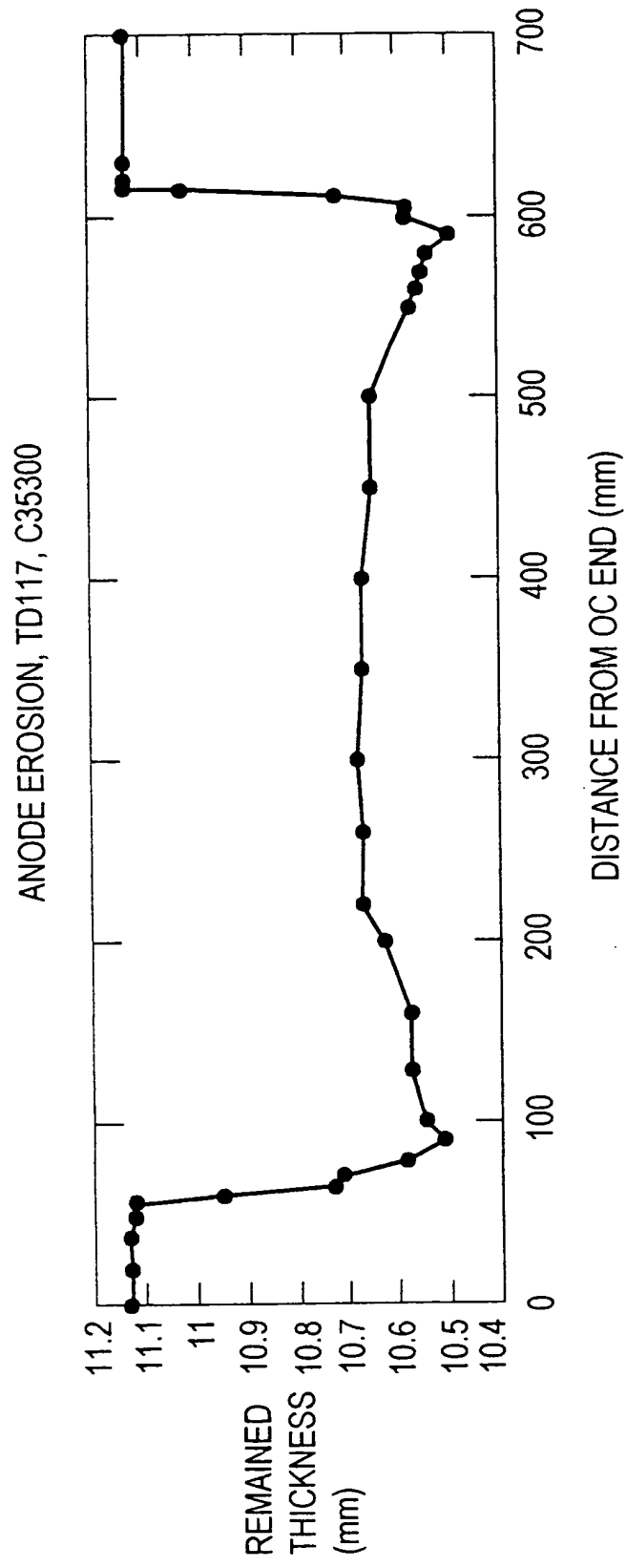


FIG. 2. Cathode Profile Changes



Typical Axial Anode Erosion Profile, 3 Bp in 4 KHz ArF

FIG. 3

FIG. 6. LOCAL C26000 ANODE AND CATHODE SEGMENT CORROSION RATES (mm/Bp)
 TD133 SEGMENTED CATHODE TEST, 2.3 Bp, 2.5 KHz, ArF, 1100V

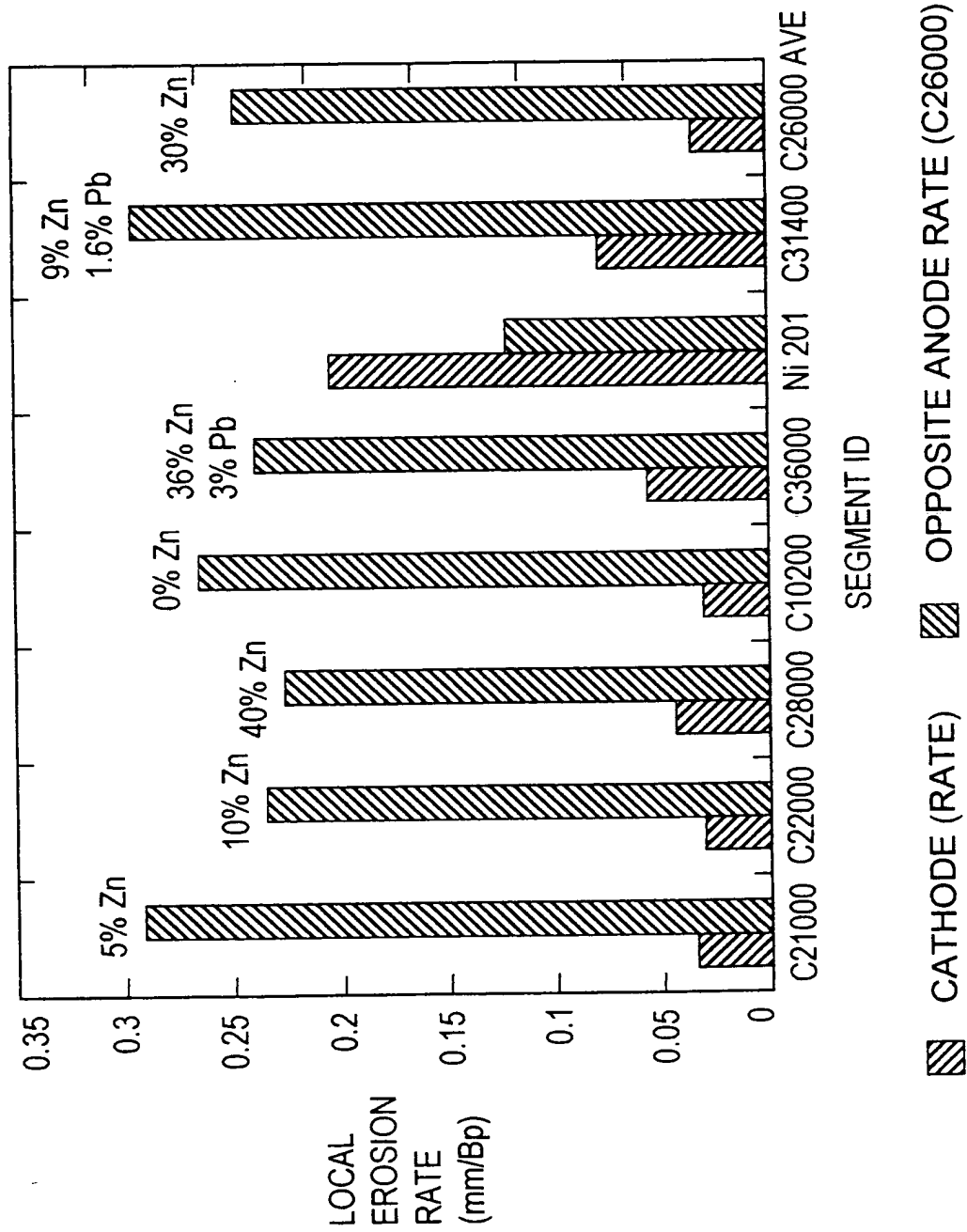


FIG. 4

Fig. 7. Cathode Discharge Width vs Material Type
(TD133, 2.5 KHz ArF, 1100 Volts, 2.3 Bp)

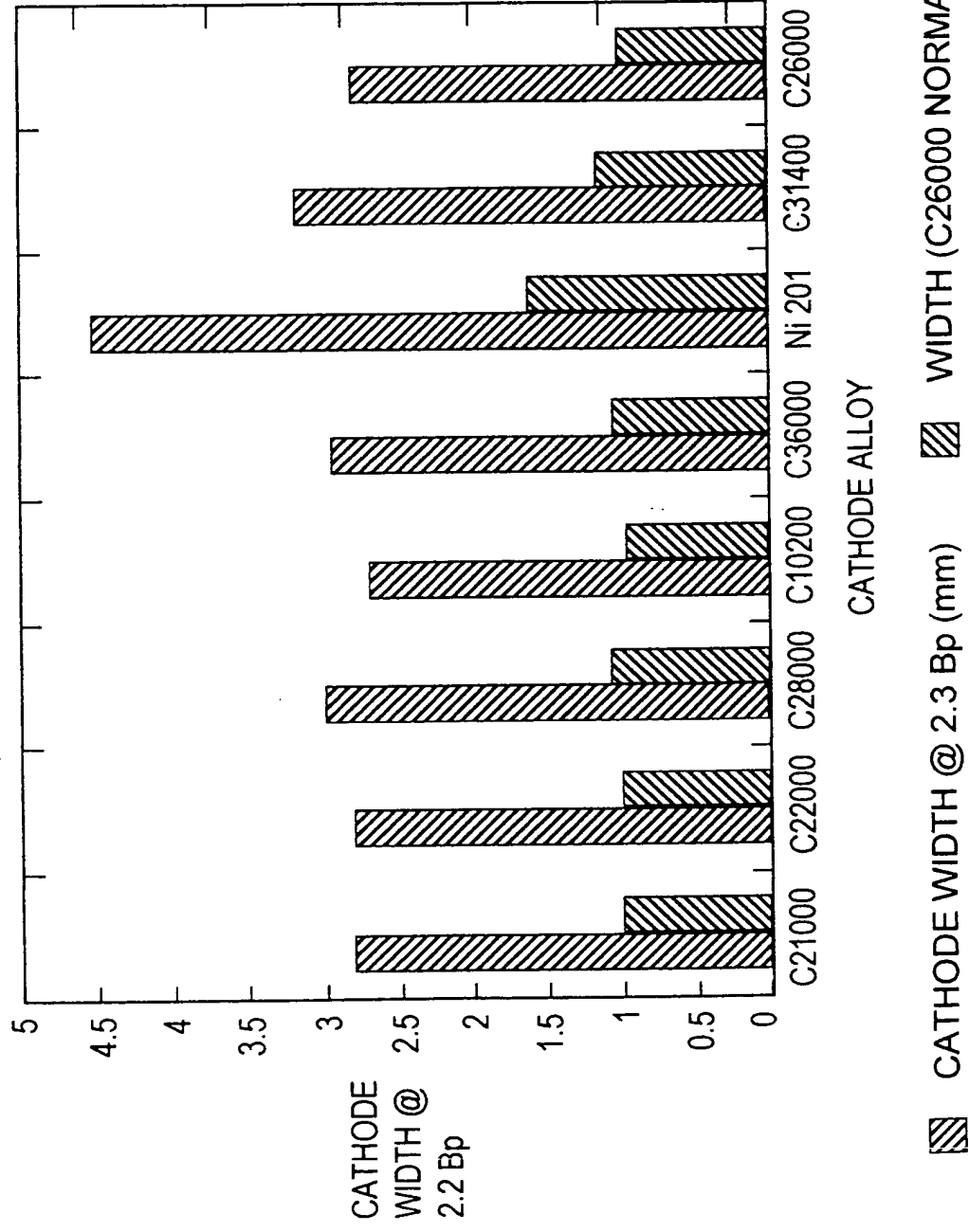


FIG. 5

Fig. 8. Surface Roughness Vs. Alloy Type C26000
 Measured by "Pocket Surf", TD133 6410A, 2.5 KHz ArF, 2.3 Bp

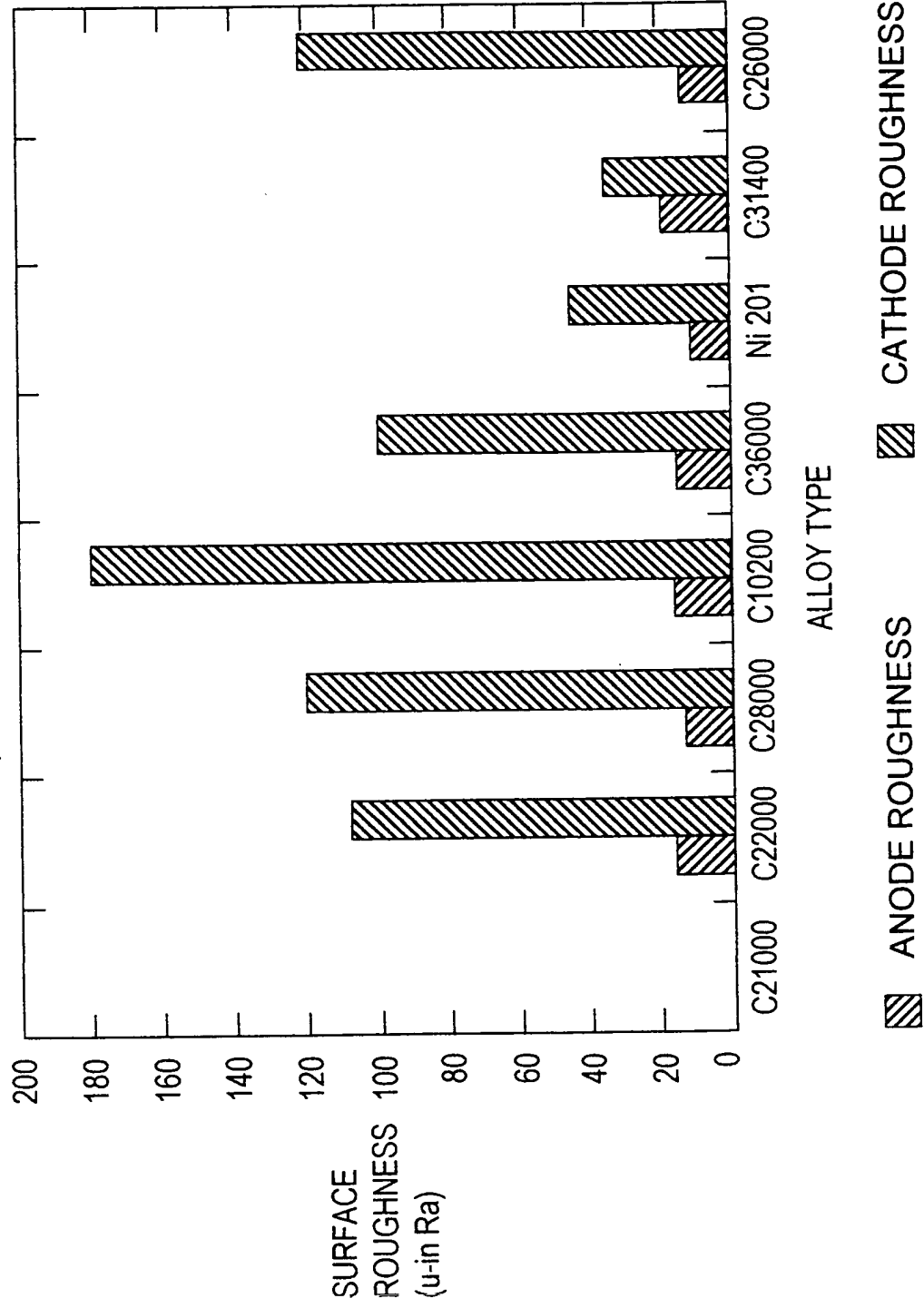


FIG. 6

Fig. 10. Average Cathode Erosion Rates (2KHz, >2Bp)

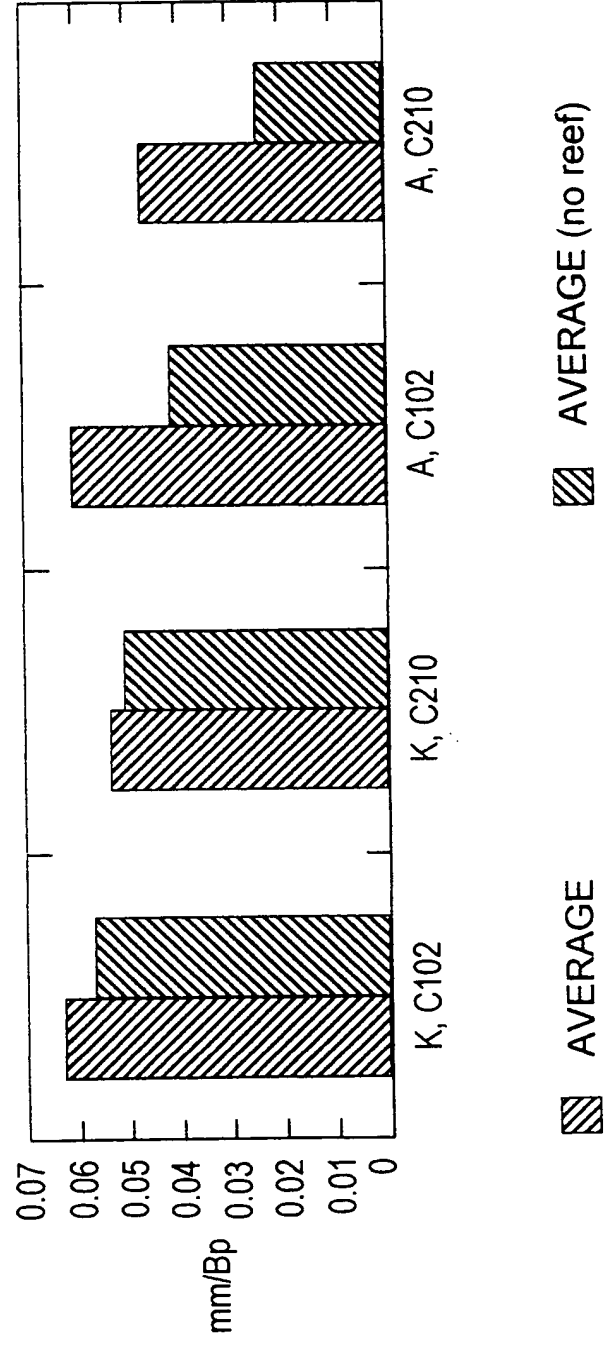


FIG. 7

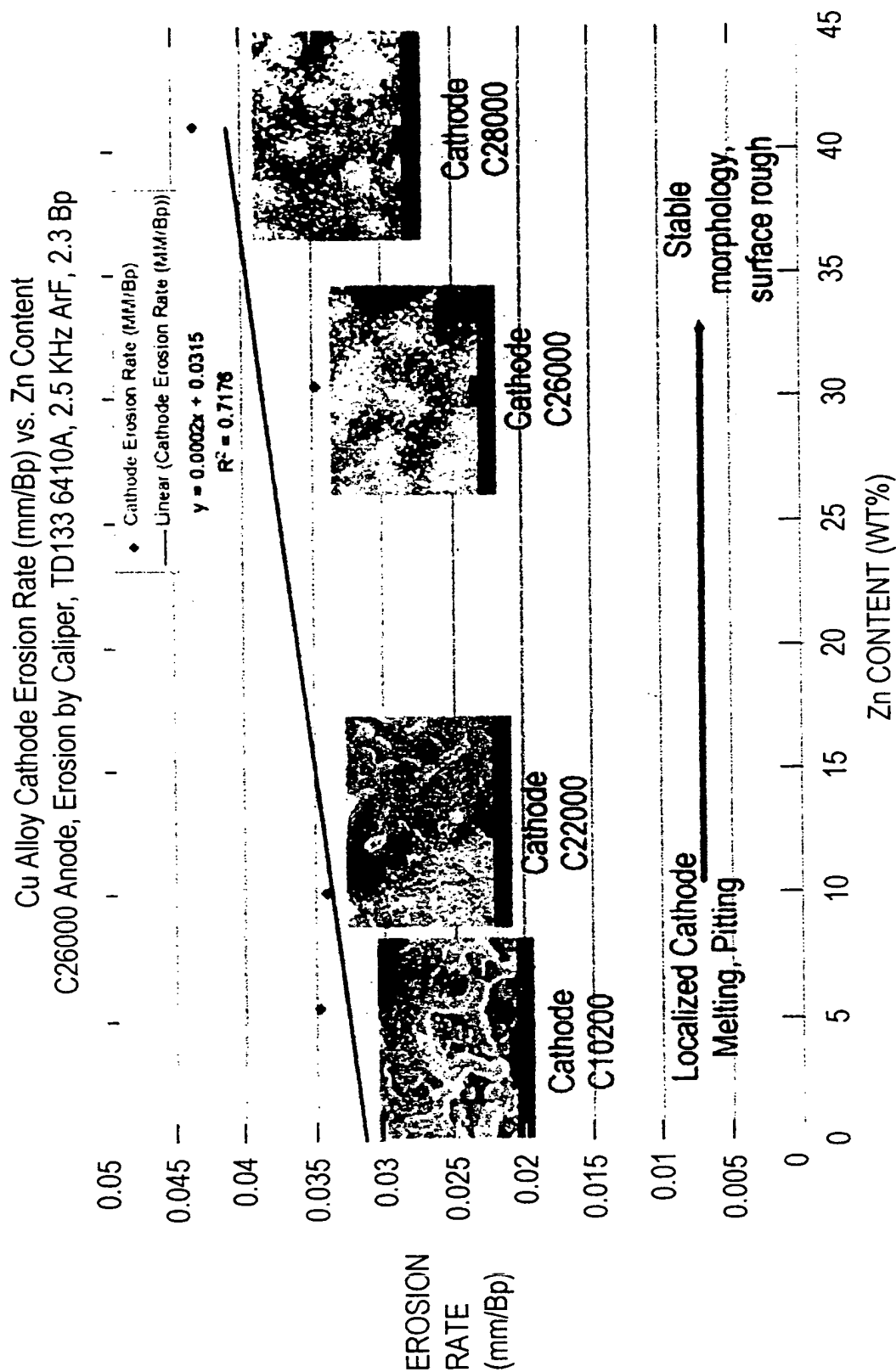


FIG. 8

Fig. 8. Surface Roughness Vs. Alloy Type C26000
 Measured by "Pocket Surf", TD133 6410A, 2.5 KHz ArF, 2.3 Bp

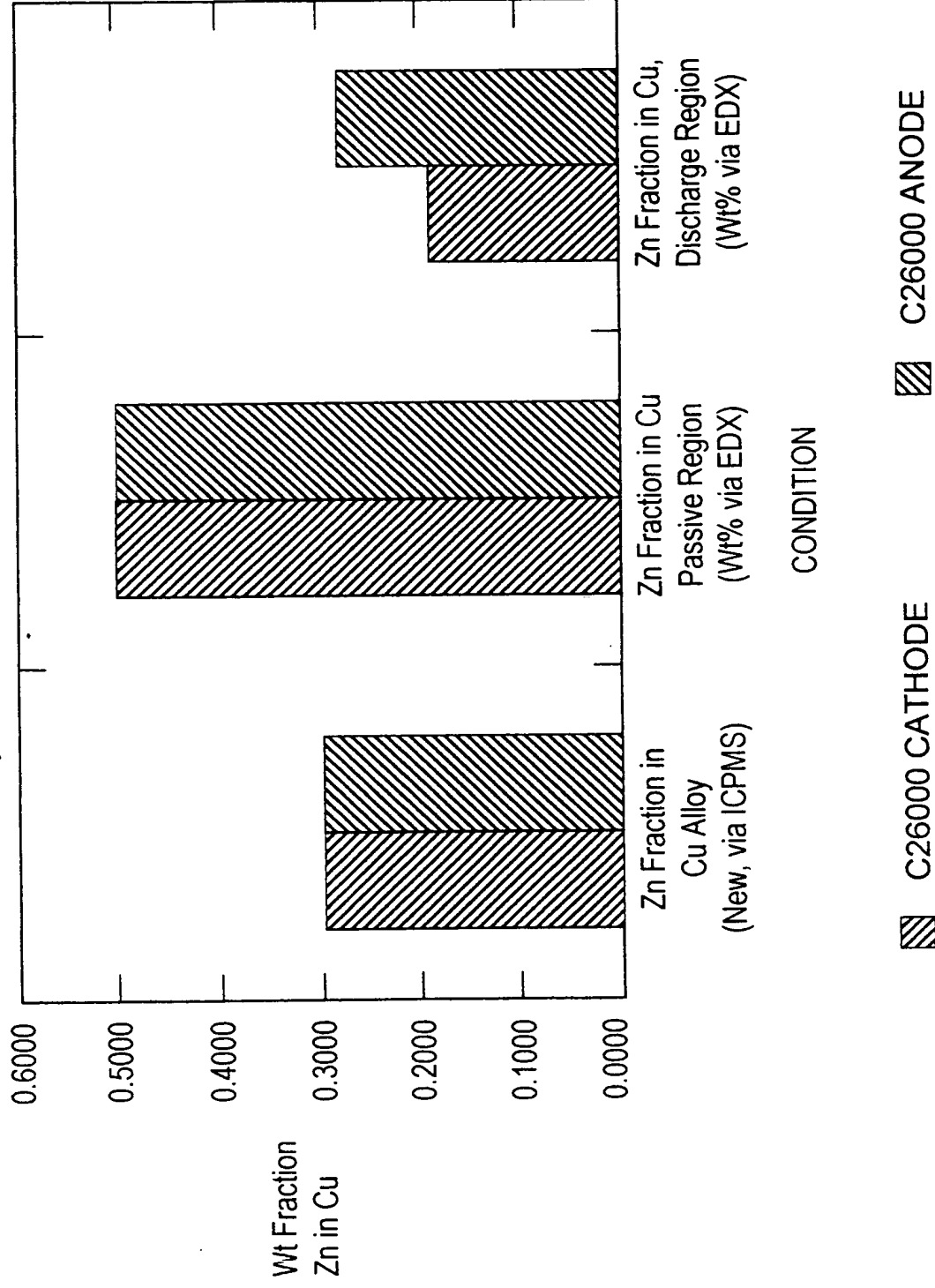


FIG. 9

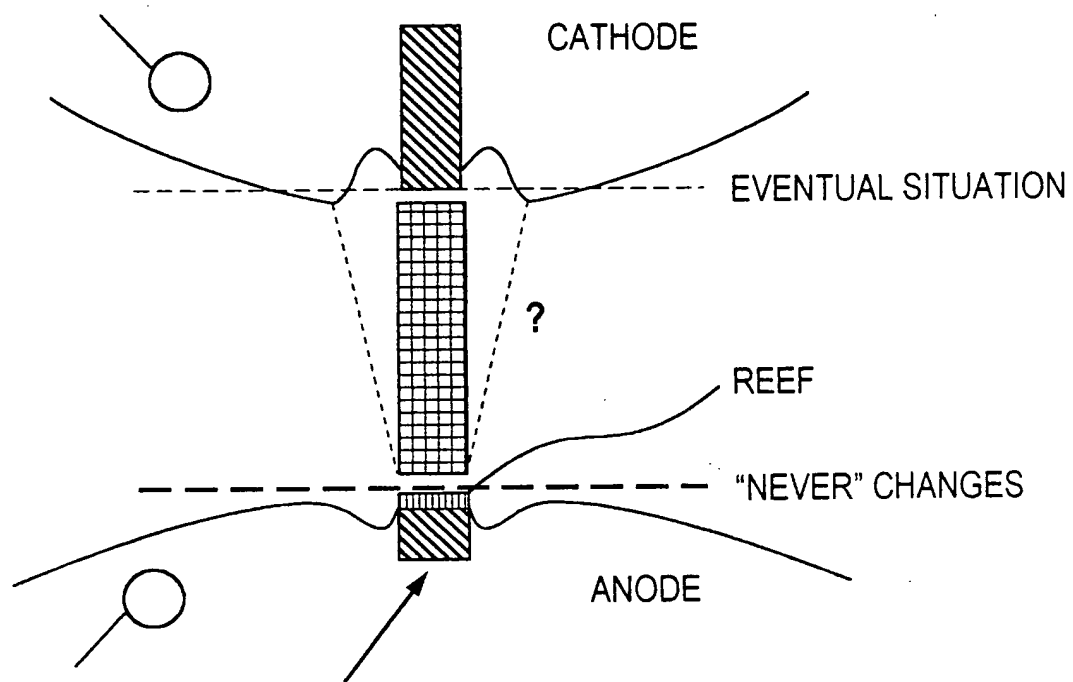
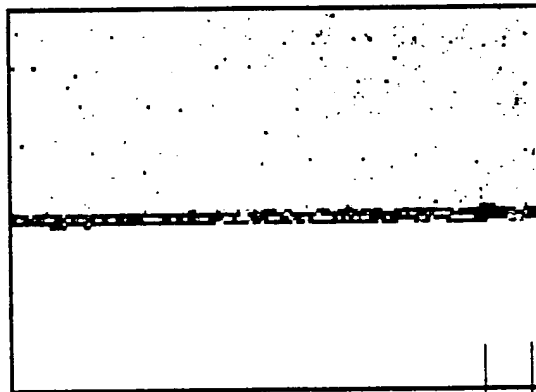


FIG. 10



200 μm

FIG. 11



C36000

C26000

200 μm

FIG. 12

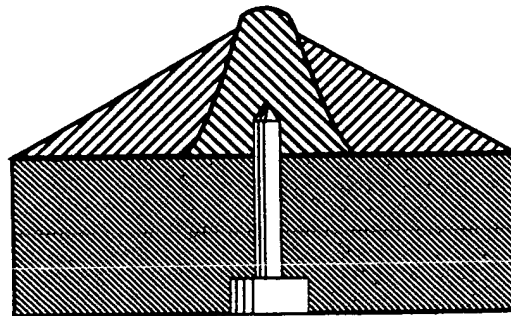


FIG. 13

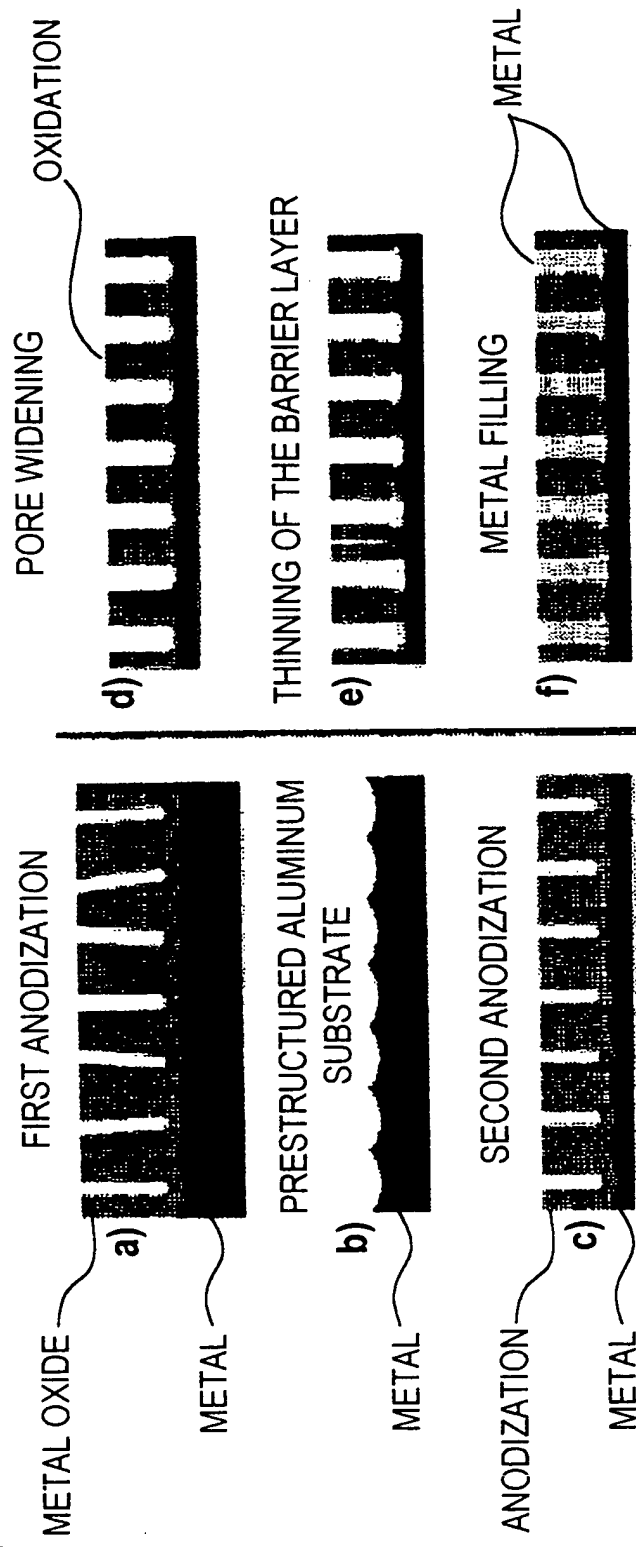


FIG. 14

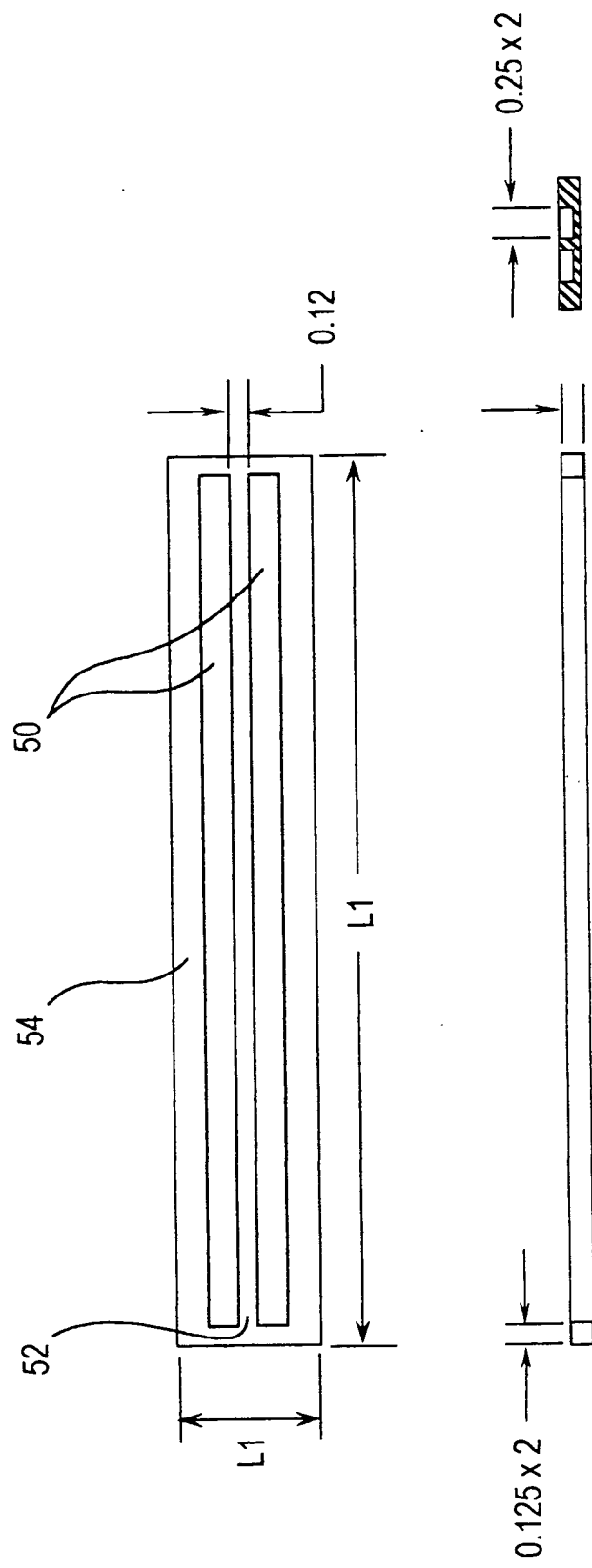


FIG. 15

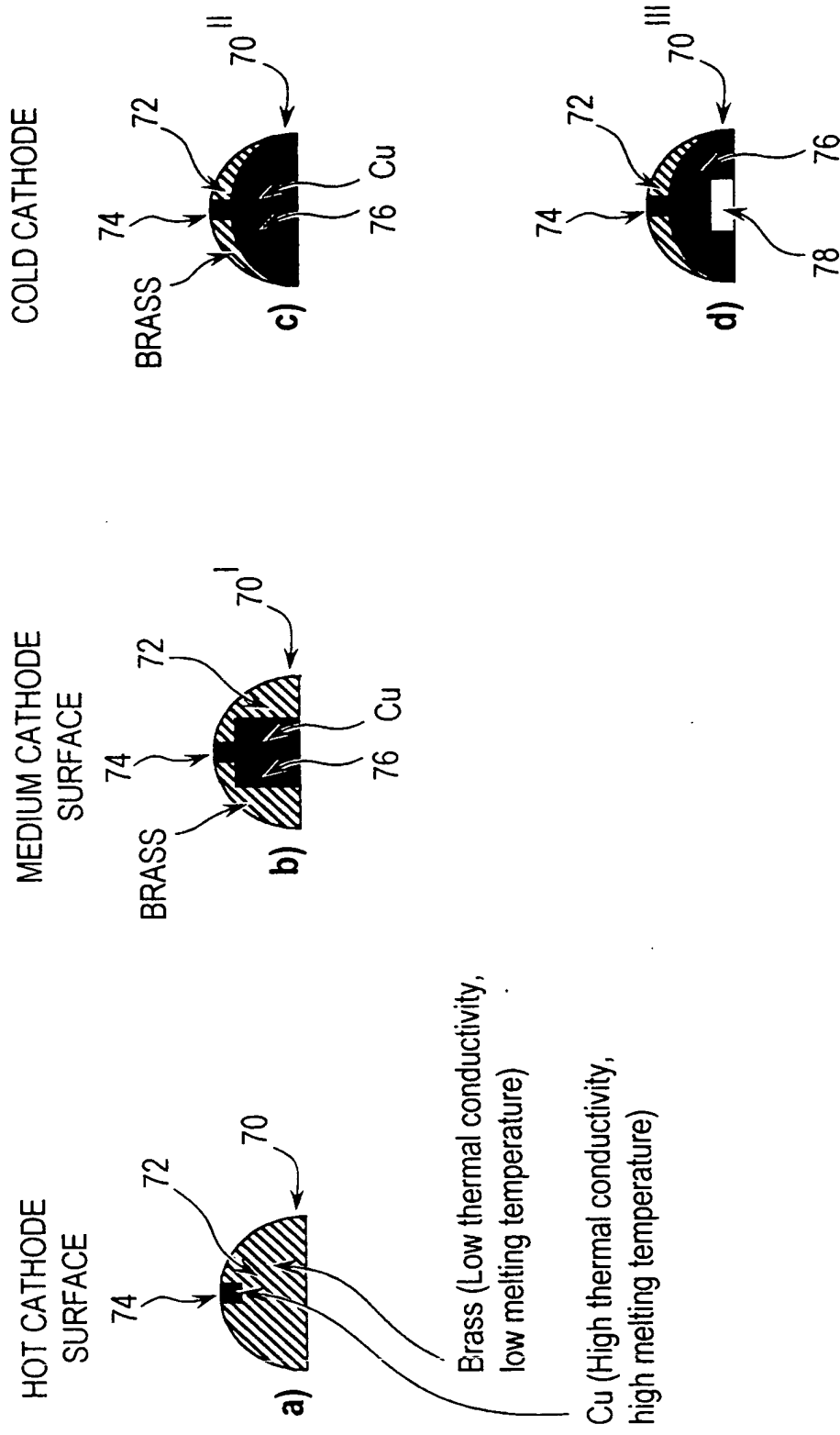


FIGURE 1. Cathode or Anode Surface Temperature Control Using Diffusion Bonding Technology.

FIG. 16

A cross-sectional view of a cathode assembly 92. It consists of a rectangular block with a curved, dome-like top surface. A label '92' points to the rectangular block, and a label 'CATHODE' points to the curved top surface.

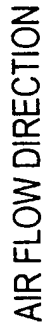
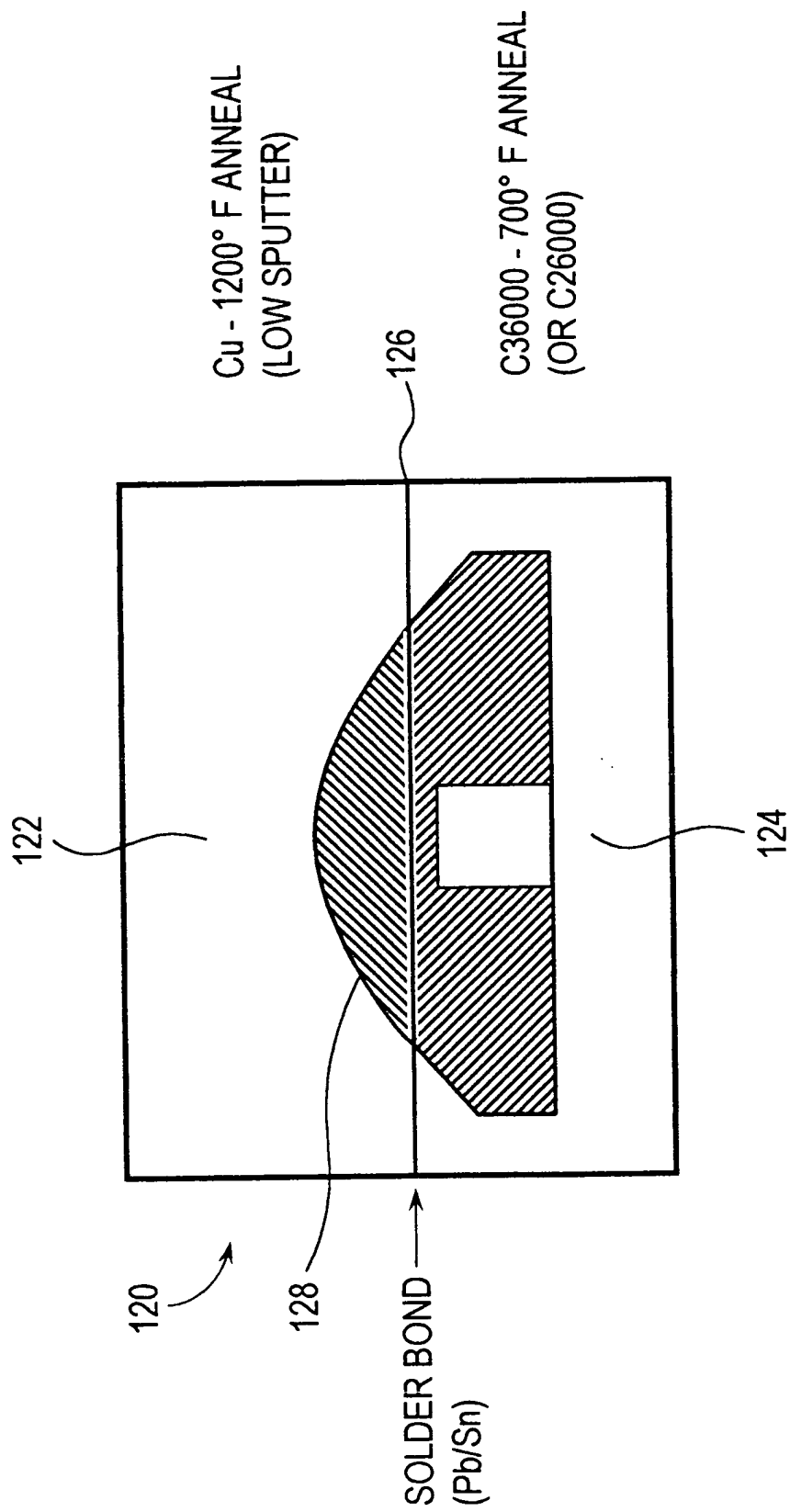


FIG. 17

Spatter rate of annealed Cu about $\frac{1}{2}$ that of brass.



Good machining and mechanical properties for mounting and gas sealing.
(Low erosion rate cathode not relying on differential erosion.)

FIG. 18

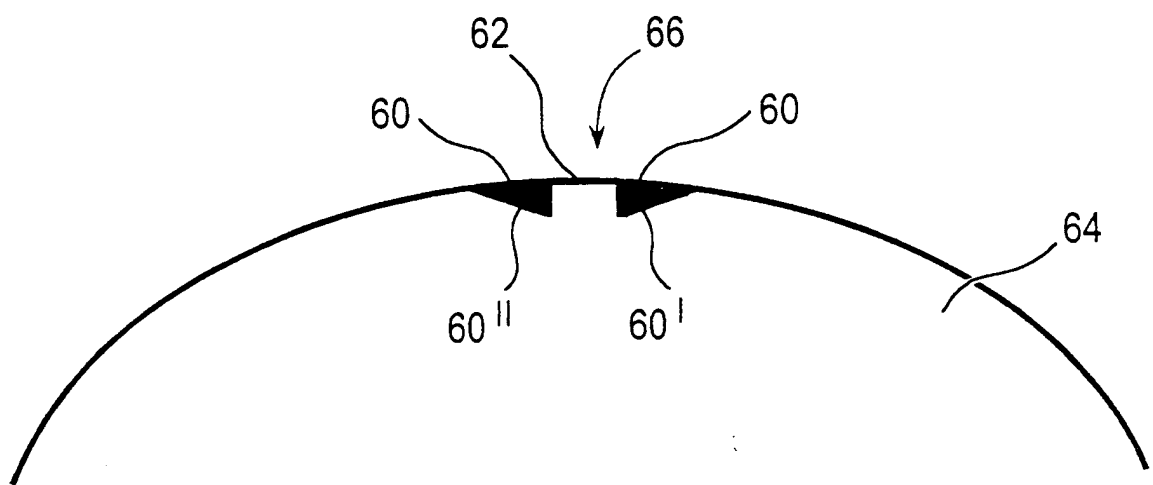


FIG. 19

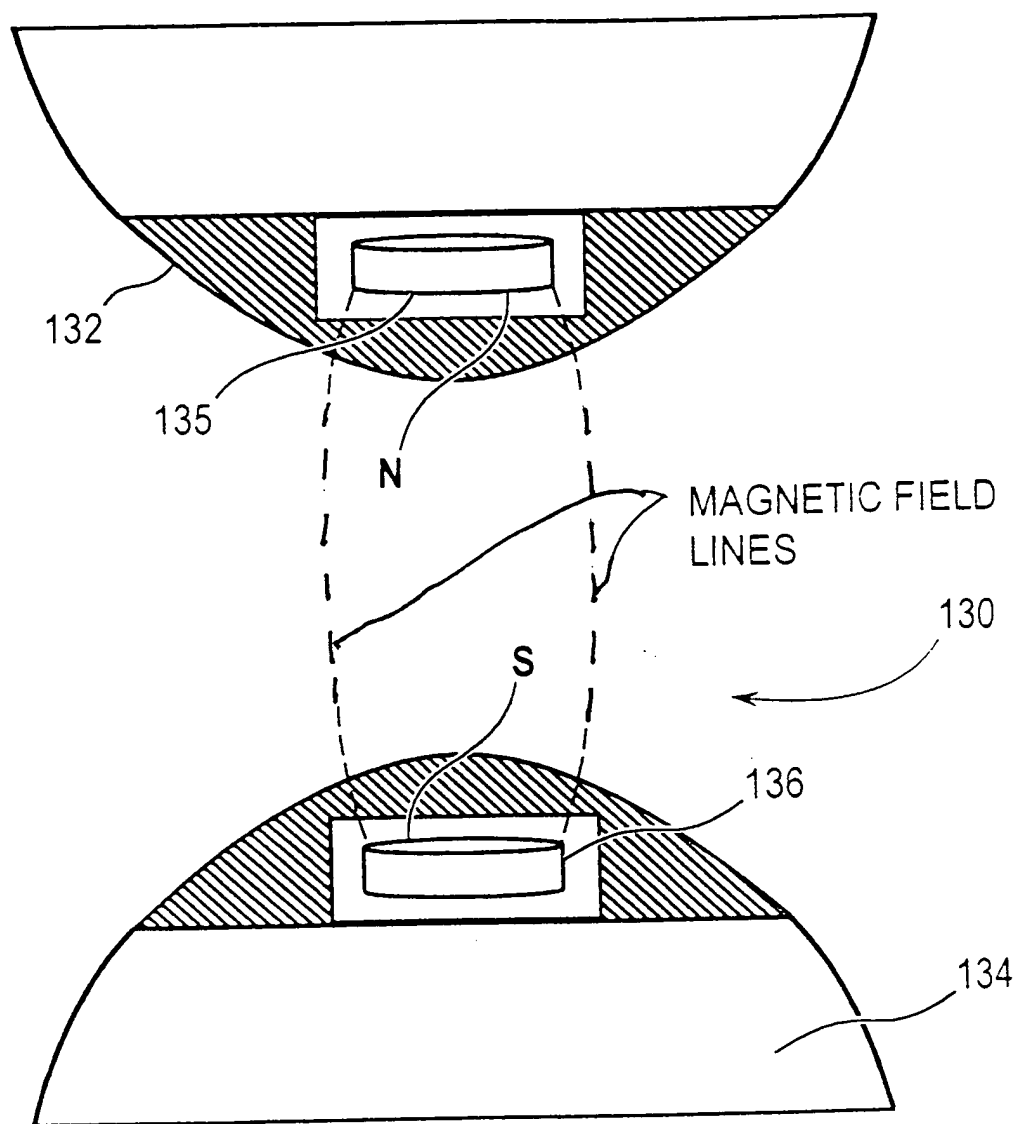


FIG. 20a

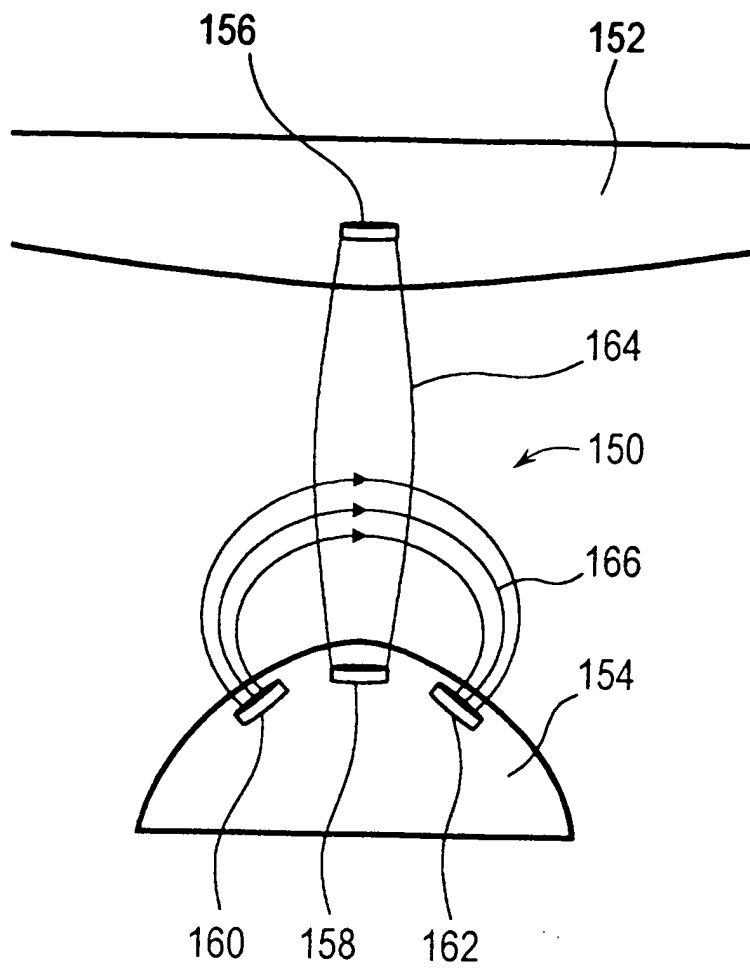


FIG. 20b

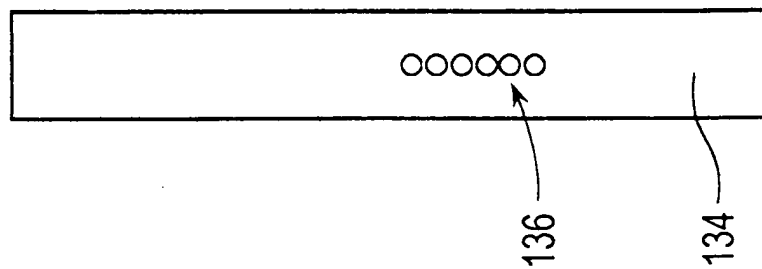


FIG. 20c

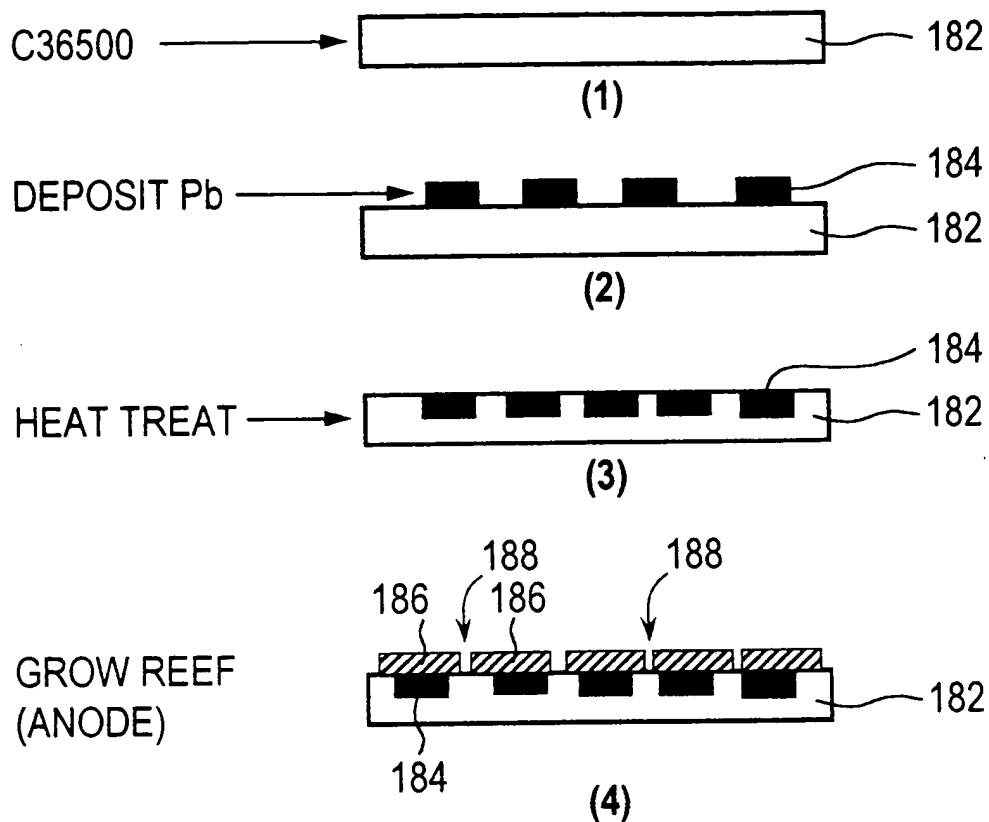


FIG. 21a

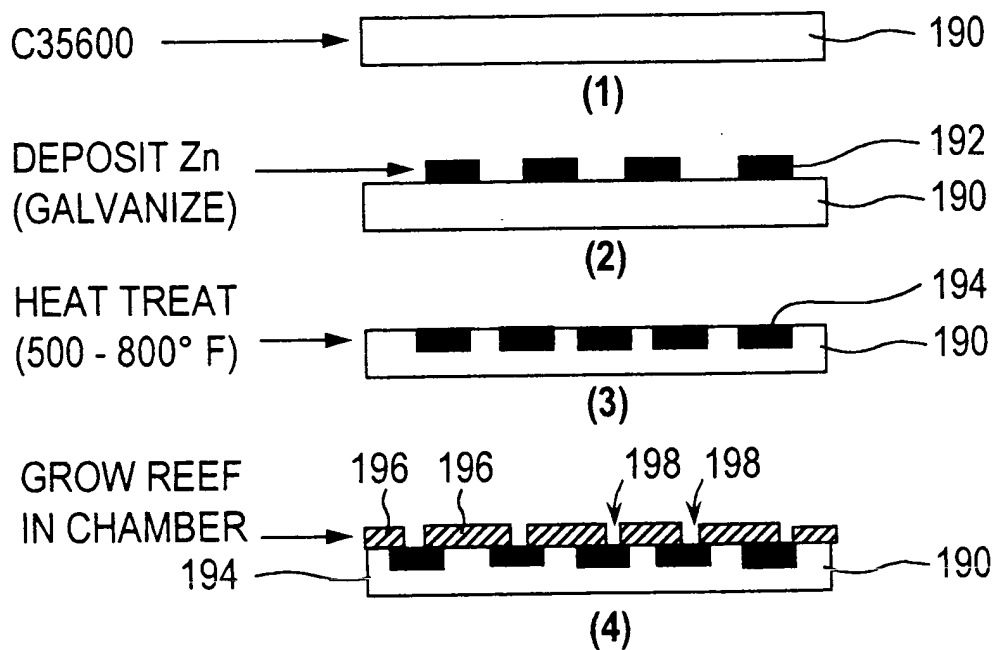


FIG. 21b

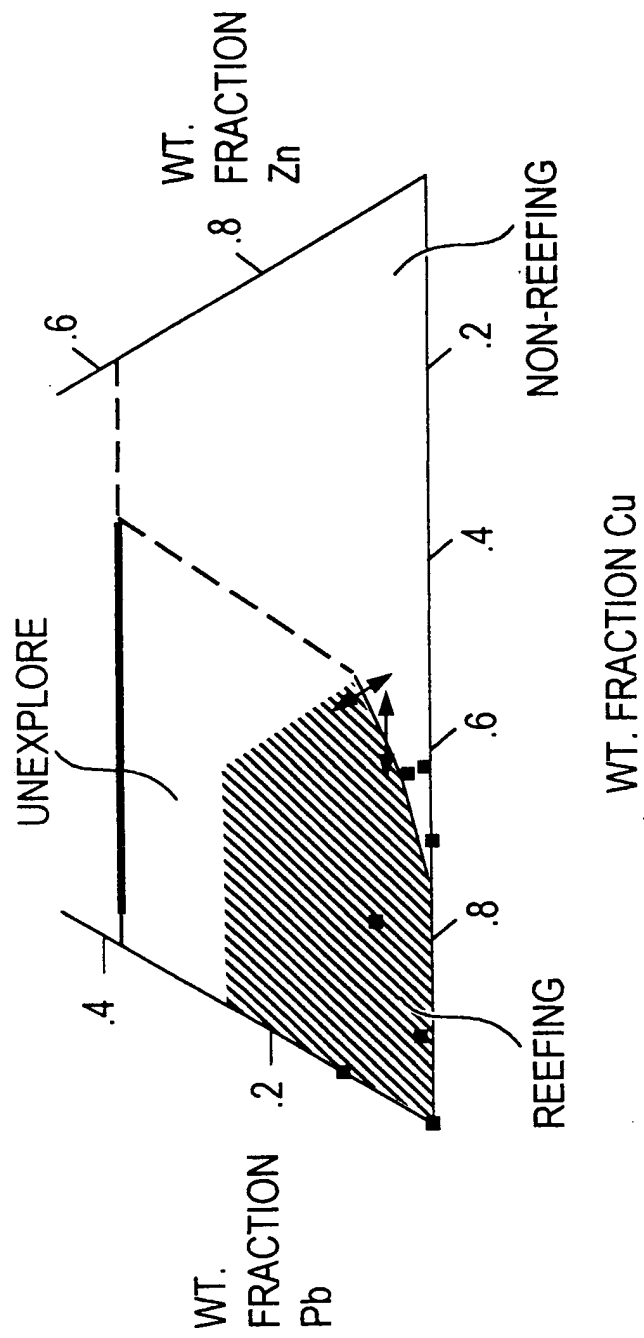


FIG. 22

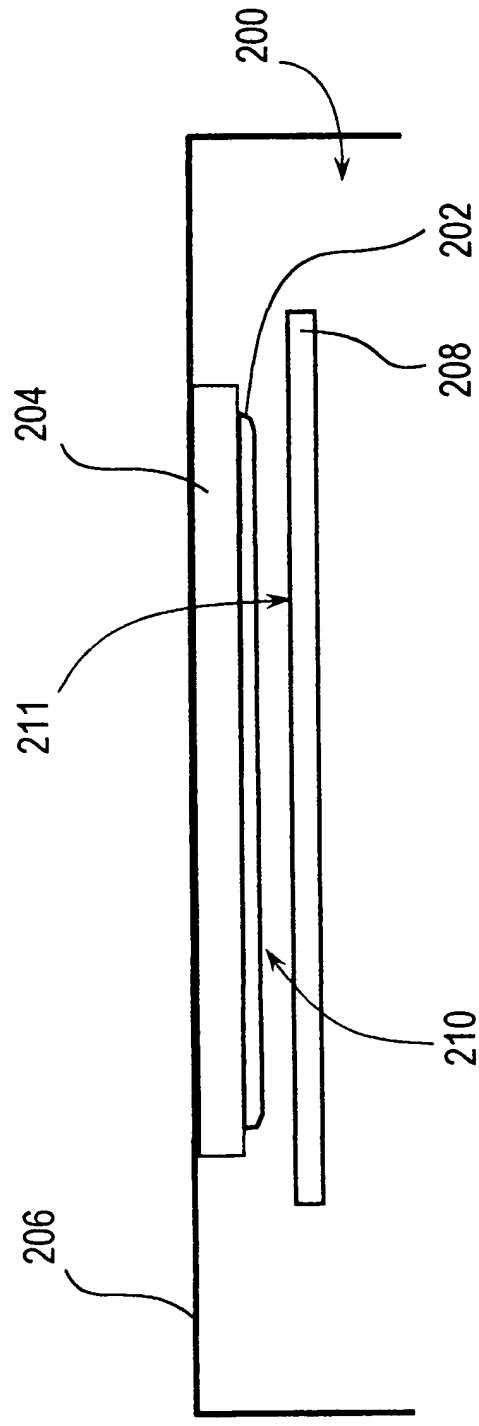


FIG. 23a

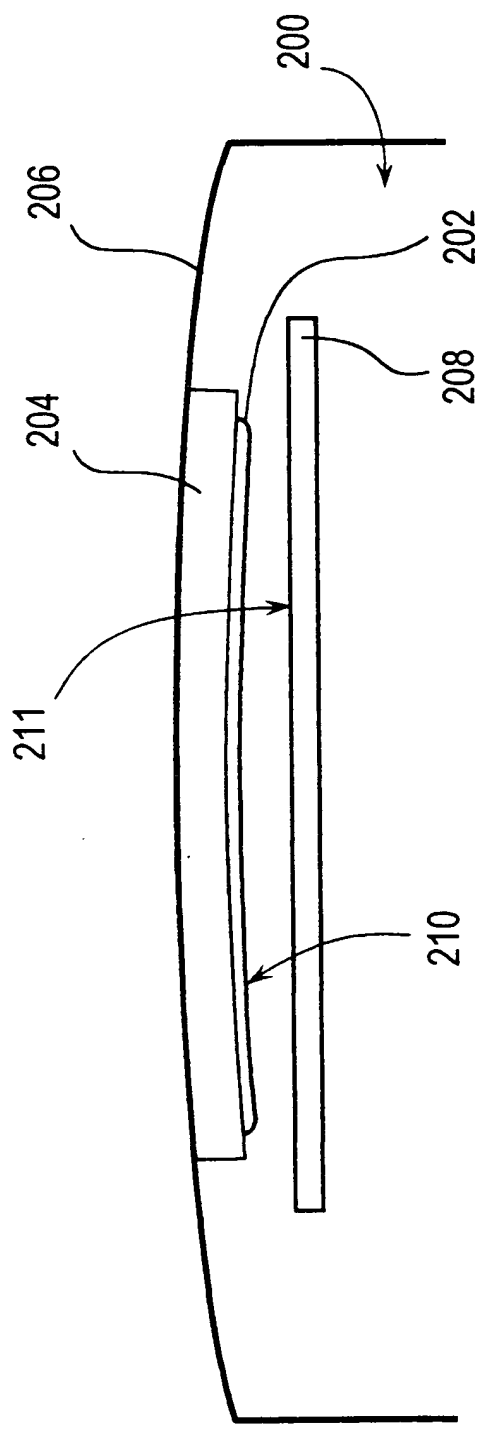


FIG. 23b

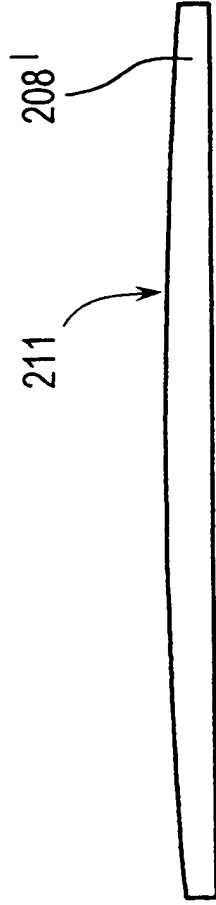


FIG. 23C

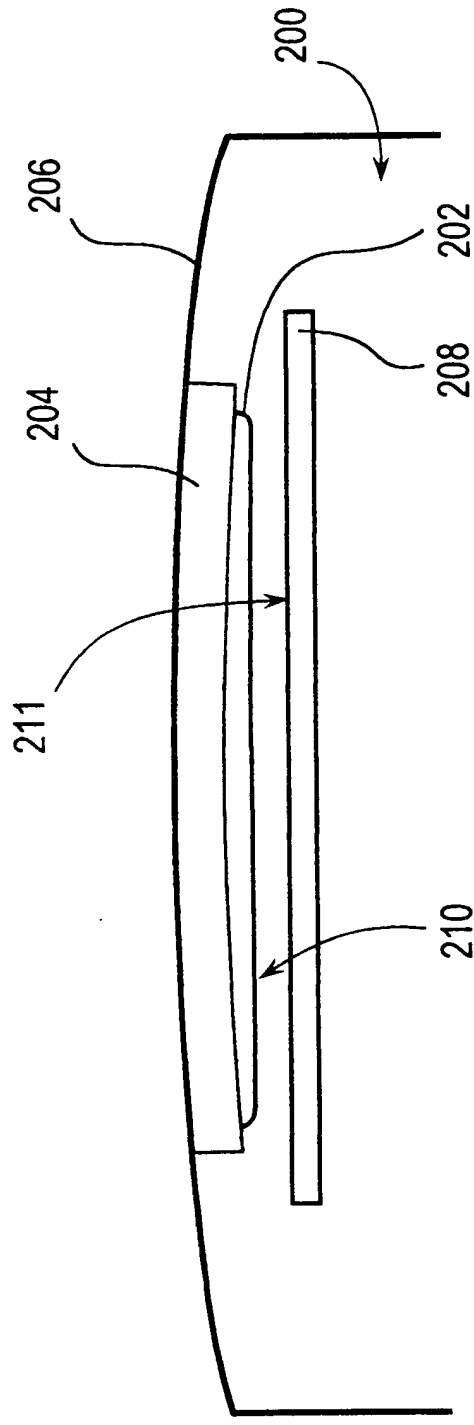
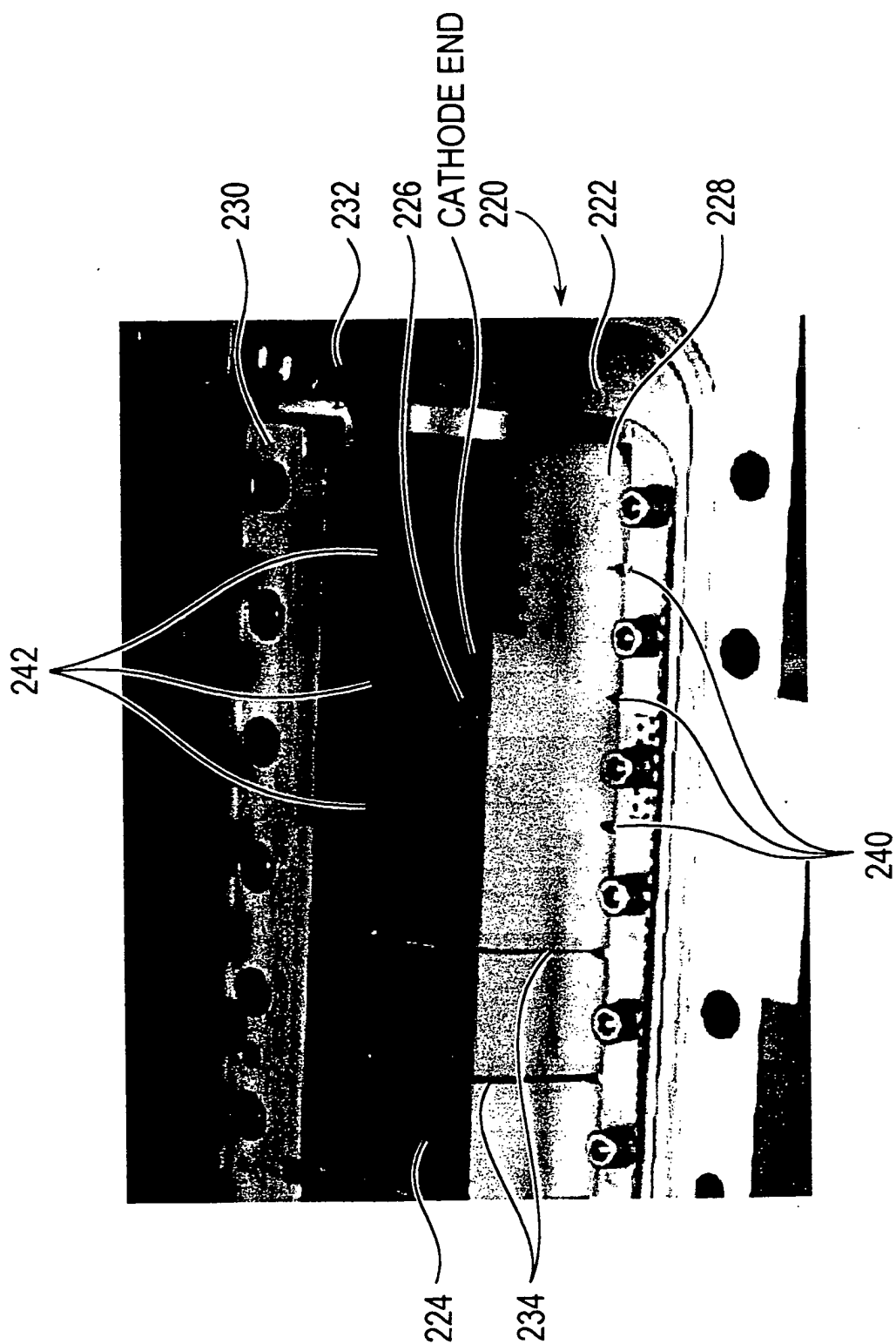


FIG. 23d



Current return tangs removed to increase inductance at end of discharge region.

FIG. 24

ANODE SLOPE



(KrF, dual brass, ~ 7Bshots, C36 center, C26 body)

(Taken in non-reefed region)



FIG. 25a

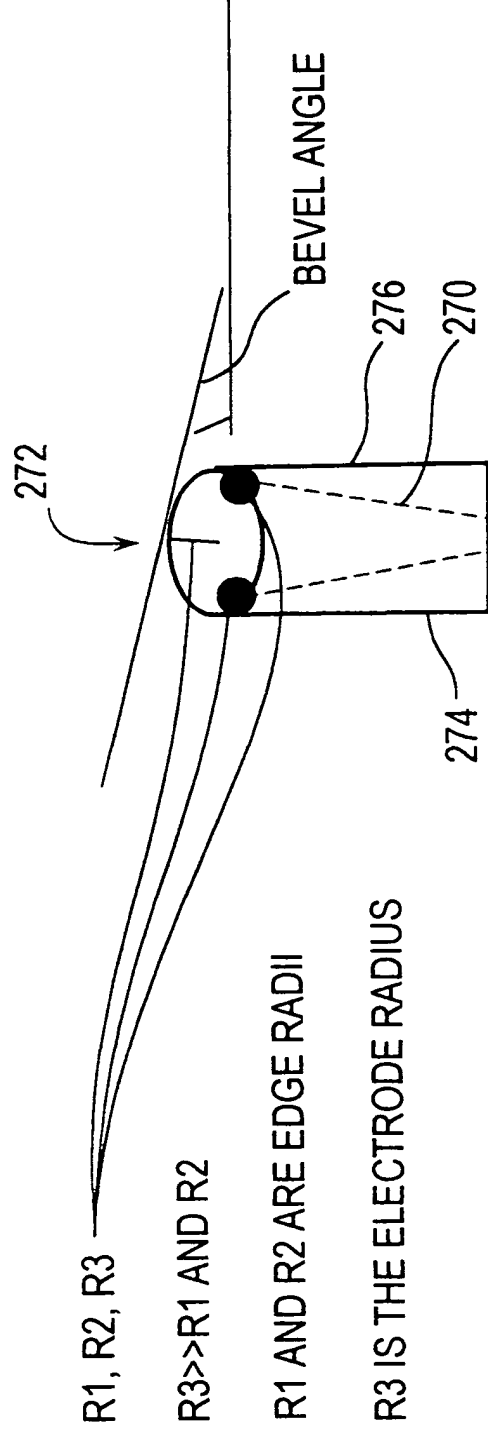


FIG. 25b